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EXAMINER

AVELLINO, JOSEPH E

ART UNIT

PAPER NUMBER

2143

DATE MAILED: 09/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/824,614

Applicant(s)

RICH ET AL.

Examiner

Joseph E. Avellino

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 April 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of: _____
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-15 are presented for examination with claim 1 independent.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 12 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 12 recites determining if the first computing entity has previously reflected the requested property, skipping step 9. Determination has been made as to if the reflection adapter has reflected the property, but not the first computing entity. If this is an oversight by the Office, Applicant is invited to point out specific points in the disclosure where this feature may be located.
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4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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5. Claims 5, 6, and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Claim 5 recites starting at step 10, however there is no steps 7-9 in the claim. Claim 3 defines a steps 7-9 (and also another step 10) but claim 5 is not dependent upon claim 3. Correction is required.

7. Claim 6, recites starting a step 13, however there is no steps 11 or 12 in the claim. Claim 5 defines steps 11 and 12 but claim 6 does not depend from claim 5. Correction is required.

8. Claim 12 recites starting at step 15, however no steps 11-14 have been defined. Correction is required.

9. The following is a quotation of the fourth paragraph of 35 U.S.C. 112:

Subject to the following paragraph, a claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed. A claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers.

10. Claims 5, 6, and 12, are rejected under 35 U.S.C. 112, fourth paragraph, as not incorporating by reference all the limitations of the claim to which it refers.

11. Claim 5 recites the limitation "skipping steps 2-5". If the invention skips these steps, then they do not incorporate those limitations into the claim. Correction is required.

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12. Claim 6 recites the limitation "skipping steps 8 and 9". If the invention skips these steps, then they do not incorporate those limitations into the claim. Correction is required.

13. Claim 12 recites the limitation "skipping step 9". If the invention skips these steps, then they do not incorporate those limitations into the claim. Correction is required.

Claim Rejections - 35 USC § 102

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 13-15 are rejected under 35 U.S.C. 102(b) as being anticipated by

Applicants Admitted Prior Art (see MPEP 2129 and *Riverwood Int 'l Corp. v. R.A. Jones & Co.*, 324 F.3d 1346, 1354, 66 USPQ2d 1331, 1337 (Fed Cir. 2003) for rules regarding admitted prior art) stated in the section "Background of the Invention", Figure 1 and specification pages 1-8 (hereinafter AAPA).

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15. Referring to claim 1, AAPA discloses a method for exchanging objects between two computing entities in an OOP environment using a transport mechanism in which said data units are contained in files, each file defining a resource, each resource designed to contain a plurality of particular ones of said objects, said method comprising the steps of:

providing a resource factory for building resources, said factory including a plurality of software modules for building resources from a data source, each said software module designed to build a resource of a particular type (Figure 1, reference character 104; p. 7, lines 1-5);

responsive to a request for an object from a first computing entity, selecting a software module for building a resource of the type to which said requested object corresponds (p. 7, lines 1-10);

building a resource for containing the requested object using said selected software module, said resource populated with information defining said resource, but not containing said requested object (Figure 1, reference character 107 and 108; p. 7, lines 10-15);

inserting said requested object into said resource (p. 7, lines 1-15);

transmitting said resource to said first computing entity using said transport mechanism (Figure 1, 107); and

providing said requested object to the first computing entity (Figure 1, 109).

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16. Referring to claim 13, AAPA discloses said data source for building is a live system (i.e. a properly working computer system) (p. 6, lines 3-7).

17. Referring to claim 14, AAPA discloses said data source for building comprises a database (it is well known that a data repository contains at least a database) (p. 6, lines 3-7).

18. Referring to claim 15, AAPA discloses said data source for building said resources comprises a document in a format other than a format of said transport mechanism (i.e. Java constructs embedded in XML documents) (p. 6, lines 3-7).

Claims 1-4, 7-9, 11, and 13-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Dorsett, Jr. (US 2002/0128734) (hereinafter Dorsett).

19. Referring to claim 1, Dorsett discloses a method for exchanging objects between two computing entities in an OOP environment using a transport mechanism in which said data units are contained in files, each file defining a resource, each resource designed to contain a plurality of particular ones of said objects, said method comprising the steps of:

providing a resource factory for building resources, said factory including a plurality of software modules (i.e. database server process 130) for building resources

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from a data source, each said software module designed to build a resource of a particular type (p. 9, ¶ 81);

responsive to a request for an object from a first computing entity, selecting a software module for building a resource of the type to which said requested object corresponds (p. 9, ¶ 85);

building a resource for containing the requested object using said selected software module, said resource populated with information defining said resource, but not containing said requested object (p. 9, ¶ 85-88);

inserting said requested object into said resource (p. 9, ¶ 85-88);

transmitting said resource to said first computing entity using said transport mechanism (p. 9, ¶ 85-88); and

providing said requested object to the first computing entity (p. 9, ¶ 85-88).

20. Referring to claim 2, Dorsett discloses only said requested object is inserted in said resource (i.e. retrieve THE object by ID) (p. 9, ¶ 85).

21. Referring to claim 3, Dorsett discloses providing a reflection adapter factory for populating objects within resources, said factory adapted to provide software modules for populating objects, each said software module designed for an environment corresponding to a requested object (p. 9);

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responsive to a request for a property of said object, selecting a one of said reflection adapters for the environment of the particular requested property (p. 9, ¶ 81-85);

populating said object with said requested property (populating its fields and sub-objects if necessary) (p. 9, ¶ 85);

providing said first computing unit said requested property (p. 9, ¶ 85).

22. Referring to claim 4, Dorsett discloses populating said object with all properties of said object that can be reflected (since the object is populated with all properties, it inherently can populate the object with properties which can be reflected) (p. 9, ¶ 85).

23. Referring to claim 7, Dorsett discloses said transport mechanism comprises XML and said files comprise XML documents (p. 9, ¶ 81-85).

24. Referring to claim 8, Dorsett discloses said objects comprise Java objects (p. 9, ¶ 81-85).

25. Referring to claim 9, Dorsett discloses said files comprise XMI documents (Dorsett discloses using XML documents, which is a superset of XMI documents) (Figure 6).

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26. Referring to claim 11, Dorsett discloses said information defining said resource comprises at least a package object of said resource (any object which is incorporated into a resource inherently helps define the resource) (p. 9, ¶ 80-85)

27. Referring to claim 13, Dorsett discloses said data source for building is a live system (i.e. a properly working computer system) (e.g abstract; Figure 1).

28. Referring to claim 14, Dorsett discloses said data source for building comprises a database (p. 9, ¶ 83).

29. Referring to claim 15, Dorsett discloses said data source for building said resources comprises a document in a format other than a format of said transport mechanism (i.e. Java constructs embedded in XML documents) (p. 9, ¶ 80-86).

Claim Rejections - 35 USC § 103

30. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

31. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

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were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dorsett in view of Francis et al. (USPN 6,665,861) (hereinafter Francis).

32. Referring to claim 19, Dorsett discloses the invention substantively as described in claim 9. Dorsett does not specifically disclose using the MOF of the OMG specification to read an XMI document. In analogous art, Francis discloses using the MOF of the OMG specification to read an XMI document (col. 7, lines 11-22). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Francis with Dorsett since Dorsett discloses packaging data using known techniques in a format for communication to a database server (p. 5, ¶ 47). This would lead one of ordinary skill in the art to find other techniques to transport data to a server, in which Francis does by using the Meta-Object Facility of the OMG specification.

Claim 5, 6, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dorsett in view of Kumar (USPN 6,651,140).

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33. Referring to claims 5 and 6, Dorsett discloses the invention substantively as described in claim 2. Dorsett does not disclose determining whether the first computing entity as stored a resource containing said object and, if so, skipping steps 2-5. In analogous art, Kumar discloses determining whether a computing entity has stored a resource containing the object, and, if so, skipping steps 2-5 (retrieving and building the resource for the object) (e.g. abstract; col. 5, lines 34-67; col. 6, lines 23-37) (Although Kumar discloses the cache is located on the server, one would find it obvious to move the cache to the client in order to further speed up the search process and to reduce processing burdens on the server and as seen at col. 8, lines 8-9). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Kumar with Dorsett since Dorsett discloses saving data for later usage and for storage (p. 11, ¶ 93). This would lead one to ordinary skill in the art to further speed up this process by conventional methods in the art, one of which is using a cache as found in Kumar.

34. Referring to claim 12, Dorsett discloses the invention substantively as described in claim 3. Dorsett does not specifically disclose determining if the reflection adapter has previously reflected the requested property and if so, skipping step 9. In analogous art, Kumar discloses determining if the reflection adapter has previously reflected the requested property and if so, skipping step 9 (it can be understood that "requested property" could be any value/method instantiated within the object) (col. 7-8, lines 53-12). It would be obvious to a person of ordinary skill in the art at the time the invention

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was made to combine the teaching of Kumar with Dorsett since Dorsett discloses saving data for later usage and for storage (p. 11, ¶ 93). This would lead one to ordinary skill in the art to further speed up this process by conventional methods in the art, one of which is using a cache as found in Kumar.

Conclusion

35. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

36. Judge et al. (USPN 6,430,564) discloses a JAVA data manager for an embedded device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph E. Avellino whose telephone number is (703) 305-7855. The examiner can normally be reached on Monday-Friday 7:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (703) 308-5221. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JEA
September 1, 2004



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